

IN THE CLAIMS

The pending claims are as follows:

1. (Previously presented) A method of closing an open end of a ribbed thermoplastic panel having a first layer with a first end and a second layer with a second end, the first layer being spaced apart from the second layer by a rib directly interconnected therewith and extending from the first layer to the second layer, the first and second ends defining the open end, the first and second layers being heat weldable or fusible, wherein the rib is formed of a thermoplastic material, the method comprising steps of:

rolling at least the first layer between spaced first and second guides configured to contact the first layer and guide the first layer along a heated guide surface toward the second layer, contacting the first layer with the second layer, and simultaneously moving the second layer to contact the first guide;

fusing the first and second layers by heating at least one of a portion of the first layer that contacts the second layer and a portion of the second layer that contacts the first layer to form a closed end extending proximate an edge of the ribbed thermoplastic panel and to define a space between the rib and the closed end.

2. (Original) A method according to claim 1, wherein the rolling step includes overlapping the first layer over the second layer.

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Original) A method according to claim 1, wherein the rolling step includes rolling both the first and second layers so that the first layer overlaps and contacts the second layer.

7. (Previously presented) A method according to claim 1, wherein the fusing step includes heating portions of both the first and second layers that contact each other.

8. (Previously presented) A method according to claim 7, wherein the portions of both the first and second layers that contact each other are simultaneously heated.

9. (Original) A method according to claim 2, further including a step of trimming at least the second layer so that the first layer extends beyond the second layer to form a tab, the tab being dimensioned to overlap the second layer.

10. (Previously presented) A method according to claim 4, further including a step of trimming the first and second layers so that the first and second layers extend substantially equally.

11. (Original) A method according to claim 6, further including a step of trimming the first and second layers so that the first and second layers extend substantially equally.

12. (Original) A method according to claim 1, further including a step of pressing and cooling the fused layers.

13. (Canceled)

14. (Previously presented) A method according to claim 1, wherein the ribbed thermoplastic panel is formed of a material selected from the group consisting of polypropylene, polyethylene, and polycarbonate.

15. (Withdrawn) The panel produced according to the method of claim 13.

Claims 16-30 (Canceled)

31. (Previously presented) A method of closing an open end of a corrugated thermoplastic panel having a first layer with a first free end and a second layer with a second free end, the first layer being spaced from the second layer by a rib extending therebetween directly from the first layer to the second layer, the first and second free ends defining a first

open end, and the first and second layers being heat sealable to each other, wherein the rib is formed of a thermoplastic material, the method comprising:

guiding the first free end between spaced first and second guides configured to contact and guide the first layer along a guide surface, and simultaneously moving the second layer to contact the first guide, with the first guide comprising a heated body, so that a first edge portion of the first layer bends and abuts a second edge portion of the second layer, wherein the guiding occurs so that prior to abutting each other the first edge portion of the first layer and the second edge portion of the second layer directly contact the heated body;

heat sealing the abutting first and second edge portions to each other to form a closed end extending proximate an edge of the corrugated thermoplastic panel and to define a space between the rib and the closed end.

32. (Previously presented) The method of claim 31, wherein the rib defines a spacing and the first and second edge portions overlap at a position along the spacing.

33. (Previously presented) The method of claim 31, wherein the corrugated thermoplastic panel comprises a second open end disposed opposite the first open end, the first free end is guided so that the first edge portion extends toward the second open end, and the first and second edge portions overlap.

34. (Previously presented) The method of claim 31, further comprising:
trimming the second layer to have a second length defined between the rib and the second free end;
wherein the first layer has a first length defined between the rib and the first free end, and the second length is shorter than the first length.

35. (Previously presented) The method of claim 31, further comprising:
guiding the second free end so that the second edge portion bends.

36. (Previously presented) The method of claim 31, wherein heat for the heat sealing is provided by an electrical heating element.

37. (Previously presented) A method of closing an open end of a corrugated thermoplastic panel having a first layer with a first free end and a second layer with a second free end, the first layer being spaced from the second layer by a member extending therebetween directly from the first layer to the second layer, the first and second free ends defining a first open end, the first and second layers being heat sealable to each other, and the corrugated thermoplastic panel further having a plurality of interior open regions, wherein the member is formed of a thermoplastic material, the method comprising:

guiding the first free end between spaced first and second guides configured to contact and guide the first layer along a guide surface, and simultaneously moving the second layer to contact the first guide, with the first guide comprising a heated body, so that a first surface portion of the first layer bends and abuts a second surface portion of the second layer, wherein the guiding occurs so that prior to the first and second surface portions abutting one another, the first and second surface portions directly contact the heated body;

heat sealing the abutting first and second surface portions to each other to form a closed end extending proximate an edge of the thermoplastic panel and to define a space between the member and the closed end.

38. (Previously presented) The method of claim 37, wherein the member defines a spacing between the first and second layers and the first and second surface portions overlap at a position along the spacing.

39. (Previously presented) The method of claim 37, wherein the corrugated thermoplastic panel comprises a second open end disposed opposite the first open end, the first free end is guided so that the first surface portion extends toward the second open end, and the first and second surface portions overlap.

40. (Previously presented) The method of claim 37, further comprising:
trimming the second layer to have a second length defined between the member and the second free end;

wherein the first layer has a first length defined between the member and the first free end, and the second length is shorter than the first length.

41. (Previously presented) The method of claim 37, further comprising:

guiding the second free end so that the second surface portion bends.

42. (Previously presented) The method of claim 37, wherein heat for the heat sealing is provided by an electrical heating element.

43. (Previously presented) A method of closing an open end of a hollow core thermoplastic panel having a first layer with a first outer surface and a first end and a second layer with a second outer surface and a second end, the first layer being spaced apart from the second layer by a member directly interconnected therewith and extending from the first layer to the second layer, the first and second ends defining the open end, the first and second outer surfaces being heat sealable, wherein at least one of the first and second layers extends beyond the member at the open end, wherein at least the first and second outer surface layers are formed of a thermoplastic material, the method comprising:

rolling at least the first layer between spaced first and second guides configured to contact the first layer and guide the first layer along a heated guide surface toward the second layer while moving the second layer to also contact the first guide, with the first guide being configured as a shoe, and contacting the first outer surface with the second outer surface along bonding regions thereof;

fusing the first and second layers by heating at least one of the bonding regions of the first and second outer surfaces to form a closed end extending proximate an edge of the hollow core thermoplastic panel and to define a space between the member and the closed end.

44. (Previously presented) The method of claim 43 wherein the thermoplastic material is flexible.